well, turning on such factors as general economic conditions, interest rates and others. The extent to which cable carries broadcaster HDTV is another factor, since 60% of broadcasters' viewers have access to over-the-air stations via their local cable systems.

Adoption of a rigid, unduly short construction period could prove counterproductive, inhibiting the development of a broadcast HDTV system. Thus, if broadcasters -- the most likely entities to implement HDTV on a mass basis -- were to lose their construction permits for failure to build within an unreasonable period of time, HDTV could suffer a severe stigma in the capital markets and elsewhere.

The availability of financing for station licensees to construct HDTV facilities is also critical. It will depend not simply upon the availability of equipment but upon the projected return on investment. This number is in turn dependent upon the rate of penetration of HDTV receivers in the market. And the penetration rate of receivers is a function of many variables, including not only the speed with which broadcasters implement HDTV, but the cost of the receivers, the speed with which other home video media implement HDTV, and the state of the economy -- variables also beyond the control of local broadcast stations and impossible to forecast.

While precise analogies are difficult to come by, it is clear from the experience of other consumer electronics products that achieving even a one percent penetration rate on HDTV receivers may well require, as did color television receivers, a decade or more. And, as the Notice indicates, a self-styled "optimistic" evaluation by the Chairman of Planning Subcommittee Working Party 5 of the ATV Advisory Committee estimates that it will take a full ten years after achieving one percent penetration for HDTV receivers to reach 40 percent of American households. Notice at n.76. These periods may be accelerated by the more rapid implementation of HDTV by nonbroadcast media. If so, artificial time limits on broadcasters are unnecessary and only serve to skew the process.[13]

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[13] The logistical and technical difficulties beyond broadcaster control which could make compliance with rigid application and/or construction timetables impossible are exemplified by the problems facing the members of The Television Broadcasters All Industry Committee ("TVAIC"), a group comprised of all ten TV licensees whose transmitters and antennae are on the north tower of the World Trade Center ("WTC") in New York City.

For example, the antenna mast at the World Trade Center is already fully occupied with antennae and transmission lines both for TV and FM. TVAIC thus does not know at this time if it will be possible to add additional facilities there and it is mindful that various rule waivers and extensions of construction permits were originally required to facilitate the consolidation of TV broadcasters at the World Trade Center. Broadcasters seeking to use this unique facility also required special assistance from the Commission when tall building construction in New York City threatened continued off-air reception to area viewers. Indeed, it took the better part of fifteen years for all stations to begin transmitting

(continued...)

[13](...continued)
from the World Trade Center.

Even if findings from an engineering and structural investigation currently underway are promising, TVAIC's members also may be faced with additional restrictions due to more stringent non-ionizing radiation regulations which both the Port Authority of New York and New Jersey (owner of the building) and the City of New York may invoke. Existing exposure standards have already necessitated that certain stations operate with less than full authorized power. Moreover, special antennae for this site will have to be designed, tested and fabricated. This promises to be an extremely time-consuming process, largely out of the control of the licensees, even if equipment orders are promptly placed. Furthermore, opportunities to install equipment on the tower itself are likely to be severely restricted due to operational, weather and safety considerations.

Space considerations also will present difficulties to many of the World Trade Center broadcasters, since their equipment rooms were never sized to accommodate both NTSC and HDTV facilities. WNBC-TV, for example, had to put its transmitter facility on the 104th floor since no additional space was available on the 110th floor, where the other nine TV stations are located. Whether additional space will become available on the upper floors of the north tower cannot be forecast at this time. Likewise, the possibility of locating facilities on the south tower of the World Trade Center is uncertain, since no antenna mast exists there and the Port Authority operates a lucrative observation deck that might preclude increasing the radiation level on the roof.

Finally, the additional AC power requirements for ten HDTV transmitters may also be considerable, possibly requiring the installation of new power risers from the basement substation to the 108th floor transformer room. TVAIC does not yet know if such service will be possible to arrange or if the Port Authority can complete such a project within the FCC's proposed timetable.

If the World Trade Center is determined to be unsuitable for the new HDTV facilities, TVAIC's members will be forced either to secure another site on an existing building or to construct a new tower elsewhere in the New York City area. No other building in New York City, however, approaches the height of the World Trade Center.

(continued...)

In any event, if broadcast stations are to be subjected to a rigid HDTV roll-out scheme, the Commission should investigate the desirability and/or necessity of applying compensatory measures to control the forces outside of broadcasters' control. At a minimum, these would include the possibility of mandatory broadcast HDTV capability in all or a certain segment of receivers and a cable carriage scheme (see discussion at 38-40, infra).

It is also significant, as the Notice indicates, that preliminary cost studies performed by CBS and others postulate that HDTV implementation will not be uniform in all

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[13](...continued)
Even if a building of adequate height can be identified, it would likely need major infrastructure modifications to support the antennae and power demands of HDTV transmission. Co-location of HDTV facilities will probably be desirable and this will exacerbate the need for (and difficulty of) such modifications. On the other hand, construction of a new tall tower would likely face exceptional difficulties as the result of FAA, zoning, building, and environmental factors. Additionally, New York City is within the US-Canadian border zone and any construction arrangements made thus will be subject to international coordination. All of the foregoing variables, of course, will be almost entirely beyond the direct control of TVAIC's ten member licensees.

Recognizing the complexity of the issues to be resolved, TVAIC (whose members operate stations WCBS-TV channel 2, WNBC-TV channel 4, WNYW channel 5, WABC-TV channel 7, WWOR channel 9, WPIX channel 11, WNET channel 13, WYNC-TV channel 31, WXTV channel 41, and WNJU channel 47) already has engaged Jules Cohen, P.E., to serve as its principal consultant and are working aggressively to answer the many questions presented by the Commission's salutary HDTV initiative. But even with expert assistance and prudent advance planning, it should be obvious that HDTV implementation in New York City is unlikely to take place in the time periods proposed in the Notice.

markets. Notice at n.33. It is quite likely that the stronger stations in the larger markets will proceed first and that weaker stations and stations in smaller markets will follow only after production economies have lowered the price of equipment and receiver penetration has reached significant levels. The Notice is not correct, however, in deriving from the CBS Study the conclusion that even smaller markets will "begin" construction within five years after an HDTV broadcast transmission standard is selected. The CBS Study suggested only that small-market implementation would begin five to six years after it had begun in larger markets.

All of these considerations argue for extreme caution in establishing a rigid construction deadline. Clearly the two-year standard is unduly short. Rather than propose an alternative which at this juncture would be equally speculative, Broadcasters believe that the Commission should not establish a construction period at this time but should declare now that it will revisit this issue three years after the adoption of a broadcast HDTV transmission standard with the objective of establishing timelines at that time. To assist these deliberations, the Commission should instruct the ATV Advisory Committee, or some comparable body convened by the Commission, to deliver to the Commission at that time a report (i) analyzing the progress of HDTV receiver development and the development and penetration of broadcast station equipment, (ii) evaluating the other relevant factors (some of

which are described above) and (iii) on that basis recommending construction periods for each size and type of market and station.

Whatever application period may be deemed appropriate in the commercial television context, greater flexibility is required for non-commercial stations. The Commission first reserved television channels for non-commercial use in 1952 because it believed that non-commercial stations would "require more time" to become operational than commercial stations.[14] This belief proved to be well-founded and should guide the Commission's formulation of HDTV policies for public television.

Many non-commercial stations will require more time than their commercial counterparts to commence operation of costly facilities. Non-commercial stations typically rely on federal, state and local government appropriations and donations from viewers to fund their operations. Despite the eagerness of the stations to launch HDTV service, their funders may not be prepared to contribute or appropriate the necessary funds until HDTV is a reality and its benefits are apparent. For this reason, non-commercial stations should be exempt from any application deadline that may ultimately be deemed appropriate for commercial stations. Rather, non-

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[14] Sixth Report and Order on Television Assignments, 41 FCC 148, 159 (1952).

commercial stations should only be required to operate in an HDTV mode by the date on which all broadcasters may be required to surrender their NTSC licenses.

D. The Conversion of the Broadcast System to HDTV Must Be Conducted with Great Care.

Broadcasters concur in the vision articulated in the Notice of the local broadcast system at some point converting entirely from NTSC to HDTV. Notice at ¶ 34.[15] If managed properly, Broadcasters agree that such a conversion could, as the Notice postulates, promote the introduction of HDTV and help to maximize the coverage areas of HDTV stations. Id. at 35. Broadcasters also agree that it is essential that the Commission perpetuate its current freeze on NTSC applications in major markets and cease issuing NTSC licenses in all markets upon completion of the assignment of HDTV channels to existing stations. Id. at ¶ 34.[16]

At this time, however, setting a required date for conversion and surrender of the NTSC channels is considerably more problematic. Establishing a definite date, as the Notice observes, ¶¶ 37, 41, will indeed provide clear notice to the

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[15] While this is an appropriate and laudable vision, it should not be rigidly determinative. History is strewn with "advances" which did not succeed. If consumers are simply unwilling to purchase HDTV sets in sufficient volume to drive down the price of HDTV sets to mass-marketing levels, the Commission should retain the flexibility to adjust its policies accordingly.

[16] With respect to non-commercial stations, see Note 8, supra.

industry and public. But if the date is insufficiently flexible and not sufficiently grounded in marketplace realities and other factors beyond broadcasters' control, mandatory premature conversion could result in enormous costs to consumers and irreparable competitive damage to the local broadcast system. Broadcasters should not have their NTSC source of revenue terminated pursuant to some arbitrary date established before anything is known about the real-world acceptance of HDTV.

Consumers also should not be deprived of NTSC service so long as a substantial number of households remain dependent upon NSTC receivers for access to local broadcast stations. Because of the difficulty in measuring with any precision the number of NTSC-dependent households, the proposal in the Notice to link conversion to a specified penetration of HDTV sets seems a reasonable surrogate.[17] But selection of a specific penetration rate and time period thereafter is, at this juncture, extremely speculative and will inevitably be arbitrary.

It is unlikely that broadcasters will have to be constrained to effectuate the full conversion to HDTV. Broadcasters have a long history of introducing expensive innovations such as color and stereo. Once HDTV catches on, broadcasters will have strong incentives to terminate the

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[17] The extent to which NTSC remains an important "second set" service should also be weighed in the balance.

additional costs (with no apparent revenue upside) of operating in two transmission modes. Only if marketplace factors either fail to function or lead to a grossly inefficient spectrum utilization should the Commission intervene to set a conversion date that forces the issue. It would be premature for the Commission to set a conversion deadline until these marketplace factors had emerged and had an opportunity to develop.

The Notice is correct in postulating that the pace of conversion to HDTV may not be uniform across all markets. There is reason to expect that smaller market broadcast stations will convert less rapidly than those in larger markets. Establishing a market-by-market standard would appear, however, to be extremely difficult to administer and to create possibilities for competitive mischief where, for example, there is a substantial overlap in station service areas. To avoid these difficulties and at the same time accommodate the likely needs of smaller markets, the Commission could set a conservatively high nationwide penetration rate. On balance, Broadcasters believe, however, that the determinations as to what periods would be appropriate should also be postponed until some period after the transmission standard is adopted and with the informed advice of the ATV Advisory Committee or analogous sources.

The reuse of existing NTSC channels by local stations will be a complicated and difficult process. As the

Notice observes, the required separation of co-channel HDTV stations is likely to be considerably greater than the required NSTC-HDTV separation. Notice at ¶ 42. Broadcasters agree that conversion and channel switching simply cannot be permitted on an individual station basis but will require careful coordination to ensure that the service areas of other HDTV stations are not adversely affected.

Broadcasters also believe that the likely interference-separation requirements render it wholly unrealistic to contemplate switching all HDTV stations back to their original NTSC channels.[18] Nor is it remotely feasible to consider "repacking" the VHF and UHF bands to condense the broadcast bands into a smaller contiguous band of channels in every market. Notice at ¶¶ 43-44. The ATV Advisory Committee has thoroughly examined and dismissed repacking as a technically viable spectrum management option. Preliminary Analysis of VHF and UHF Scenarios -- Part II, ATV Advisory Committee, Planning Subcommittee, Working Party 3, Doc. 0174 (June 1991). Furthermore, these schemes would require an enormous additional investment by local stations at a time and under circumstances where they are certain to be under extreme competitive pressure.

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[18] However, this may be possible in some cases without any adverse interference consequences. In those instances, the Commission should give broadcasters the flexibility to retain their NTSC channel assignment for HDTV transmissions.

Broadcasters believe that great caution is also warranted in contemplating the use of "freed up" broadcast spectrum for alternative uses. While conversion to an exclusively HDTV system may hold some promise in this respect, Broadcasters observe that there is a tension between the objectives of maximizing HDTV station service areas and reallocation of the spectrum to alternative uses. There will be many other factors to be taken into account if and when it becomes appropriate to terminate the use of NTSC channels for regular broadcast purposes. Trying at this time to determine what those factors will be and their relative weights would be a highly speculative exercise with no beneficial purpose.

E. The Commission Should Retain Flexibility to Deal Effectively with Simulcast Issues in the Future.

In its discussion of a possible simulcasting requirement, the Notice, in Broadcasters' view, properly articulates two competing considerations that need to be balanced in determining what the requirement should be -- ensuring that consumers with NTSC sets continue to receive top quality service during the transition period to HDTV and affording broadcasters sufficient flexibility to ensure that the new HDTV technology succeeds in the marketplace. It omits another consideration which should be given considerable weight -- the extent to which a simulcast requirement is a content-based regulation implicating diversity and First Amendment concerns.

Broadcasters believe that the goal of protecting the NTSC consumer would not require a simulcasting requirement at the beginning of the conversion process. At a time of low HDTV-set penetration, the broadcaster has every incentive to maintain the quality of its NTSC service, and should, therefore, be given maximum flexibility at the outset of the conversion period. It may be argued that this incentive could diminish as the conversion period progressed. A simulcasting requirement might be instituted after HDTV had achieved substantial penetration and expanded in stages geared to the rise in nationwide HDTV-set penetration.

However, even this approach raises serious policy issues that it is not necessary or desirable to resolve at this time. While the relative emphases on HDTV and NTSC may shift over time, the threat to NTSC quality may never materialize. The need for additional regulatory protection of NTSC service may also be obviated by technological developments such as an inexpensive down-converter. Accordingly, Broadcasters believe that the Commission should monitor nationwide HDTV-set penetration and the programming practices of broadcasters during the transition period and consider revisiting the simulcasting question in its discretion as that transition progresses.

In any case, it is certain that the interest in allowing flexibility for HDTV experimentation is greatest during the earlier rather than later part of the conversion

period. As the new technology develops, broadcasters and the public will benefit from experiments in techniques of presentation inspired by HDTV attributes. These experiments would be encouraged if broadcasters were not charged from the outset with the burden of also acquiring or producing NTSC versions of the same programs.

Finally, if some simulcasting regulation is ultimately considered, Broadcasters suggest that "one program" -- for the purpose of applying the term "simulcast" -- be liberally interpreted to include instances where there may be some differences in program content between the HDTV channel and the NTSC channel but where the program is nevertheless fundamentally the same.[19] This would include, for example, sports events where a broadcaster may choose to employ additional cameras in order to produce 16 X 9 aspect ratio camera angles specifically for the HDTV transmission that may not be suitable for 4 X 3 NTSC broadcasts. Another example would be a theatrical movie presented in its original (or close to original) aspect ratio on HDTV but presented in a "pan and scan" version on the NTSC channel. Similarly, stations may find it desirable or necessary to carry different commercials and other non-program material. In these instances and others, where the same event or the same underlying material forms the basis for the program and the

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[19] The same considerations should apply to the content of commercials.

variances are designed better to accommodate the program material to the special nature of either the HDTV or NTSC medium, Broadcasters believe the Commission should consider the program to be "one program" for the purpose of satisfying any simulcasting requirement.

F. No Financial Showings by Existing Stations Should Be Required.

The Notice proposes the imposition of a financial qualifications requirement for broadcast HDTV applications as a means of expediting the introduction of broadcast HDTV and preventing "warehousing" of HDTV channels. Notice at ¶ 22. The Notice also postulates that, should the Commission authorize post-assignment private negotiations over channels and service areas, such a requirement would reduce the danger of speculative applications filed solely for the purpose of obtaining a pay-off from sincere applicants. Id.

These concerns appear to be valid with respect to new applicants for HDTV channels, i.e., those without constructed, operating NTSC facilities. Broadcasters believe, however (assuming all can be accommodated with HDTV channels), that with respect to functioning existing stations, adoption of an appropriate site-specific channel-pairing plan, perhaps in conjunction with an appropriate "use or lose" requirement, will serve adequately to promote the expeditious introduction of broadcast HDTV and will preclude any substantial warehousing. A site-specific plan, by maximizing the extent

to which HDTV service can be provided, will also reduce the potential gain from private negotiations and thus the likelihood that an existing station would file an HDTV application solely for the purpose of trading frequencies or service areas with other stations. We believe the proper analogy is an application by an existing station to cover an auxiliary or alternate main transmitter or antenna. In that instance, no financial showing is required.

III. Other Issues

A. Early Coordination with Canada and Mexico is Essential.

Preliminary spectrum availability studies indicate that in large border markets developing an adequate number of HDTV channels will require close coordination with Canada and Mexico, as recognized by the Commission in its Tentative Decision and Further Notice of Inquiry in this proceeding, 3 FCC Rcd 6520, ¶¶ 103-04 (1988). The ATV Advisory Committee has been performing useful work addressing these issues and, we understand, will be submitting recommendations to the Commission in its Fifth Interim Report, now scheduled for March 1992. All concerned should recognize the inadequacies of and delays inherent in the current case-by-case intergovernmental coordination process. In this instance, the Commission must essentially remake the entire Table of Allotments. Coordinating this process with Canada and Mexico will be a very significant and time-consuming process. It is

vital that the Commission initiate this process at the earliest possible time.

B. Translators Should Be Given Priority Over LPTV Stations.

With one exception, Broadcasters believe that the Notice properly analyzes the status of LPTV stations and translators and concurs with the proposal to continue the secondary status of such stations while giving displaced LPTV's and translators a licensing priority. Notice at ¶¶ 30-32. There is simply no doubt that the conversion of the local broadcast system will require displacement of a substantial number of LPTV and translator stations in major markets. The Commission has been consistent and unwavering in its treatment of LPTV and translator operators as secondary services and LPTV and translator licensees long have been on notice of the possibility of displacement. From the very outset of its HDTV inquiry, the Commission recognized that LPTV and translator stations could be displaced by allocation of spectrum to allow full-service broadcasters to implement HDTV. While freezing uses of spectrum that could potentially compete with HDTV spectrum grants, the Commission did not freeze LPTV and translator station applications because they "constitute a secondary service and pursuant to present rules are subject to displacement by a primary service. Therefore, LPTV and television translator grants will not restrict Commission options." Advanced Television Systems and Their Impact on the

Existing Television Broadcasting Service, RM-5811, Mimeo No. 4074, slip op. at 3 n.4 (July 17, 1987). The Commission recently reaffirmed this position in stating, in the context of announcing a filing window for LPTV and translator applications, that "low power television and television translator stations continue to have secondary status with regard to the introduction of ATV service." Notice of Limited Low Power Television/Television Translator Filing Window, PN 12124, slip op. at 1 n.1 (March 12, 1991). The Commission has reiterated the secondary nature of LPTV and translator stations on scores of occasions.[20]

Broadcasters believe, however, that the Commission should grant translators, i.e., those stations utilized to fill in or extend the service of existing full-power broadcast stations, a priority over LPTV stations in the displacement and relocation process. These translators are essential adjuncts in many parts of the country to assure that all areas

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[20] See, e.g., Television Satellite Stations, Review of Policy and Rules, 5 FCC Rcd 5567, 5569 (1990) ("LPTV stations, like translators, are a secondary service, unprotected against new television allotments. They are not generally considered as a service in allotment and licensing proceedings."); Amendment of the Commission's Rules Concerning Full Power Television, Low Power Television and Television Translator Stations, 3 FCC Rcd 1974 (1988) (LPTV and translator stations "must give way to a full-service station proposing a mutually exclusive use of a frequency."). See also Univision, Inc., 4 FCC Rcd 2417, 2418 (1989); Changes in the Rules Relating to Noncommercial, Educational FM Broadcast Stations, 57 RR2d 107, 115 (1984); Elba Development Corp., 5 FCC Rcd 6767 (1990); Commission Policy Toward Terrain Shielding in the Evaluation of Television Translator, Television Booster and LPTV Applications, 3 FCC Rcd 7105 (1988).

of the country have access to at least some full-power local broadcast service. Thus, translators should have a priority over LPTV stations with respect to, at a minimum: 1) determining which translator/LPTV stations in a market must be vacated to make way for full-power HDTV; and, 2) locating substitute channels for the displaced translator/LPTV stations.

C. Additional Auxiliary Spectrum May Be Required.

Broadcasters also disagree with the proposal in the Notice not to allocate any additional spectrum for broadcast HDTV auxiliary purposes. Notice at ¶ 33. While it is true that compression techniques will expand the effective capacity of existing auxiliary spectrum and that certain links can be served through coaxial or fiber optic cable, these developments will not satisfy all auxiliary needs in the largest markets.[21] Accordingly, the Commission should investigate alternative spectrum bands which may be underutilized. In particular, HDTV auxiliary uses should be on the list of uses to which the additional spectrum to be reallocated from government users may be put. S. 218 & H.R. 531, 102nd Cong., 1st Sess. (1991). In addition, Broadcasters

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[21] The Notice cites Planning Subcommittee Fourth Interim Report at 12-14 for the proposition that there may be sufficient auxiliary spectrum in the markets below the top 30. Notice at n.68. The Notice fails to note, however, that this same report concludes that there will not be sufficient spectrum in the top 30 markets.

resist vigorously recent suggestions that broadcast auxiliary spectrum in the 1990-2110 Mhz band may be an appropriate location for personal communications services. Policy Statement and Order, Gen. Docket No. 90-314, FCC No. 91-338, at ¶ 4 (released October 25, 1991) (suggesting that a portion of the spectrum to be allocated to PCS "should come from 1.8 to 2.2 Ghz"); Comments of Motorola Inc., Gen. Docket No. 90-314, at 23 (submitted November 21, 1991 for December 5, 1991 PCS En Banc Hearing) (". . . Motorola recommends the Commission focus further on the 1990-2110 Mhz auxiliary broadcast spectrum" as potential source for PCS allocations.) Depriving Broadcasters of this spectrum would significantly limit their ability to implement HDTV.

D. Land Mobile Sharing of UHF Spectrum Should Be Ended or Reduced.

It has now been nearly seven years since the Commission first proposed to reallocate UHF spectrum in the ten top markets to land mobile radio uses. Notice of Proposed Rule Making, Gen. Docket No. 85-172, 56 F.R. 25587 (June 20, 1985). It has been four years since the Commission initiated this proceeding and put the land mobile/UHF sharing docket on hold. In the Matter of Further Sharing of the UHF Television Band by Private Land Mobile Radio Services, Gen. Docket No. 85-172, 2 FCC Rcd 6441 (1987).

As Commission studies have now conclusively demonstrated, Notice at n.50, while there may be enough

spectrum in most of those same top markets to accommodate all existing stations with the requisite amount of spectrum to implement HDTV, it is inconceivable for the foreseeable future that those markets will contain a meaningful amount of additional spectrum for reallocation to land mobile. Accordingly, no useful purpose is served by keeping the land mobile/UHF sharing docket open, especially since keeping that docket open continues to foster some degree of uncertainty as to the Commission's commitment to HDTV. The time has clearly come to end that proceeding.

The Commission should, moreover, investigate in this proceeding whether it would be necessary and feasible to reallocate to broadcasting UHF channels in certain border markets already reallocated to land mobile but never activated. In Cleveland and Detroit, for example, Channels 14 and 15 respectively were reallocated to land mobile radio, First Report and Order, Docket No. 18261, 23 FCC2d 325 (1970), but, because of coordination difficulties with Canada, have never been constructed. Taking into consideration the likely HDTV spectrum demands of Canada, the Commission's initial spectrum studies indicate that these channels may well be essential to provide sufficient HDTV spectrum to accommodate all existing broadcasters in those markets.

Furthermore, the Commission should follow through with its earlier promise to revisit the allocation in Docket No. 18261, First Report and Order, supra, at 341, 343, and

reallocate some or all of the unused or lightly used channels from land mobile back to broadcasting. Spectrum availability studies indicate that such a reallocation will help achieve the goal that sufficient HDTV spectrum is available in top markets.

E. Compatibility With Other Media Is Desirable But Should Not Be Determinative.

The Commission has properly expressed an interest in selecting a broadcast HDTV standard that facilitates compatibility with other media. In the case of cable this consideration is especially important because so many viewers obtain access to broadcast television via cable. Compatibility with computers is a related issue, and the Advisory Committee has taken the appropriate steps to ensure that this consideration will be taken into account in the standard-setting process. However, because of spectrum and other technical issues uniquely related to over-the-air broadcasting, the Commission should give priority to adopting an HDTV system that is suitable for over-the-air broadcasting. It is much more likely that a system which suits the needs of the broadcasting public can be made compatible with other media than it is that a system chosen for its compatibility with other media can overcome, for example, its failure to provide enough HDTV channels or sufficient coverage.

F. Cable Carriage of HDTV Channels Must Be Considered.

One additional consideration should not be ignored by the Commission. While Broadcasters are being asked to make the necessary capital expenditures for HDTV, their ability to implement HDTV will depend in large measure on whether all viewers in the market can receive a station's HDTV signal over their cable systems. Today, cable television is the predominant purveyor of video product to the household, with approximately 60% of all television households subscribing to cable. Lack of HDTV signal carriage into these cable households will create barriers to the rapid deployment of broadcast HDTV.

Unless there is some assurance of HDTV signal carriage, a broadcaster may be reluctant to invest in HDTV because a majority of its audience will not have access to the HDTV signal. Moreover, stations wishing to launch HDTV operations will need to raise additional capital to finance the purchase of equipment and fund additional operating costs. Experience shows that lenders are often reluctant to make commitments for new broadcast channels unless there is a commitment of carriage by local cable systems.

While increased channel capacity on some cable systems may attenuate some carriage problems, it is at best uncertain whether expansion in cable's channel capacity will occur throughout the cable universe. Also, it has become

increasingly clear that cable and broadcasters now compete directly for viewers and advertising revenue. There is every reason to believe this competitive dynamic will apply to new HDTV channels.[22] Some stations which now enjoy cable carriage of their NTSC signals may find it difficult securing access for their HDTV signals. Indeed, it is quite possible that cable operators in some markets would continue to carry a broadcaster's NTSC signal while deciding not to provide access for the HDTV signal. Alternatively, a cable operator may either decide to carry only the HDTV signal or to force a broadcaster to select which signal, NTSC or HDTV, it wants to have carried.[23]

As the Commission's OPP Report noted, competition between cable and broadcasting will intensify in this decade. FCC Office of Plans and Policies, "Broadcast Television in a Multichannel Marketplace," 6 FCC Rcd 3996, 4000-01 (1991). Today's economic climate is at best uncertain. The Commission cannot realistically expect broadcasters to make substantial investments in HDTV without assurances on the signal carriage

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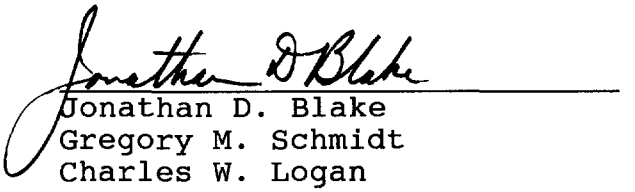
[22] As the Commission observed correctly, HDTV will likely be introduced by non-broadcast sources. Broadcast HDTV signals will face immediate competition from these sources. It is quite possible these non-broadcast sources will seek to protect their share of the HDTV market.

[23] Either situation will impair HDTV development. The negative effect of failing to provide access to a broadcaster's HDTV signal is obvious. Even if the HDTV signal is carried, denying access to the NTSC signal will impair a broadcaster's economic base, undermining HDTV deployment.

issue. Although it may be premature to develop HDTV signal carriage rules at this point, and though technological development in cable transmission and the efficacy of broadcast HDTV may obviate the need for specific rules, broadcast HDTV signal carriage is an important policy consideration that must be addressed.

Respectfully submitted,

ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.



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